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#### UNITED STATES PATENT AND TRADEMARK OFFICE

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# BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 09/971,946 Filing Date: October 04, 2001

Appellant(s): AZPITARTE, JEAN-PATRICK

**MAILED** 

JUL 1 2 2006

**Technology Center 2100** 

Barry L. Kelmachter For Appellant

**EXAMINER'S ANSWER** 

This is in response to the appeal brief filed April 25, 2006 appealing from the Office action mailed September 19, 2005.

#### (1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

#### (2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

#### (3) Status of Claims

The statement of the status of claims contained in the brief is correct.

#### (4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

## (5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

#### (6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

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### (7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

#### (8) Evidence Relied Upon

Spira et al, U.S Patent Publication No. 2003 0172002 [hereinafter "Spira"];

U.S Patent No. 6437692	Petite	8-2002
U.S Patent No. 6553336	Johnson et al [hereinafter "Johnson"]	4-2003
U.S Patent No. 4568909	Whynacht	2-1986

#### (9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- Claims 13 and 15-19 are rejected under 35 U.S.C § 103(a) as being unpatentable over Spira et al, U.S Patent Publication No. 2003 0172002 ["Spira"].
- 2> As to claim 13, Spira is discloses a system for remotely and automatically controlling, by a facilities management company, maintenance of facilities by a maintenance company

with regards to the contract binding the maintenance company to the facilities management company [0019, 0111], said system comprising:

local monitoring units, each local monitoring unit being installed in close proximity to at least one piece of said facilities and associated thereto [0022, 0037, 0041, 0121 : locally installed modules enable online monitoring], each local monitoring unit comprising:

means for measuring operation parameters of the associated piece of facilities for detecting an operational state thereof [0231, 0354: "integrated sensors...collect measurements continuously"],

means for being connected to a transmission network [0022: "communication connection"], and

means for transmitting through said transmission network said detected operational state of said associated piece of facilities [0121, 0354];

a first and a second computer, each being connected to the local monitoring units through said transmission network and comprising means for receiving and processing said detected operational state [0055, 0112]; and

means for storing all information transmitted by the local monitoring units said first computer being available to the maintenance company and is used to manage the maintenance of said facilities, and said second computer being available to the facilities management company and is used to automatically control the maintenance and repair tasks performed by the technicians of said maintenance company on said facilities with regards to their contractual obligations [0036, 0055, 0252, 0256, 0258 where: Spira discloses his Computerized Maintenance Managements system implemented at both the customer system

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and the provider center (maintenance company). He further discloses the customer has substantial control over the operations of the maintenance company through the use of modules, the substance of the maintenance company's work defined in part by the selection of the modules as well as the performance requirements of the agreed upon contract].

Spira discloses a control means to track technicians during their maintenance and the repair tasks performed, said control means being independent from the operational state of the associated piece of facilities [0258, : "program management module ... provides a focal point for the information management, improved tracking and reporting of performance..."] but does not expressly disclose that the means allows a maintenance technician to real-time notify the start and the end time of his maintenance.

However, Spira further discloses a maintenance protocol for reviewing the quality of maintenance work including reviewing such performance indicators like maintenance actions, frequency of work, duration of work and by entering new equipment items [0139]. Thus, because of Spira's disclosure of being able to review maintenance actions and the duration of work, there is an implied ability to track the start and end time of the work [in order to be able to determine the work's duration] as well as the repair tasks performed during the maintenance by the repairman [maintenance actions].

It would have been obvious to one of ordinary skill in the art to implement the ability to monitor start and end times of a maintenance job along with any repair tasks performed in Spira. Spira's maintenance review capability and in particular the ability to monitor the maintenance actions and duration of work provides an obvious motivation to suggest such functionality would be required and implicit in his embodiments. Furthermore, the ability to

track and monitor a technician's work in Spira's maintenance services would enable both customer and the maintenance company to evaluate the performance according to the agreed upon indicators as defined within the contract [0019].

- As to claim 15, Spira does not explicitly disclose the system wherein each said local monitoring unit for preventing the first and second computers from sending information relating to malfunctions and failures detected between the start and the end of said inspection and signaled using said control means.
- However, the functionality to prevent transmissions of malfunctions during the inspection is well known in the art for providing the benefit of preventing sending redundant or false alarms on failures which the technician is there to repair. This functionality is analogous to a technician taking equipment offline so that appropriate repairs can be made; thus claim 15 is directed towards automating a process that is normally manually performed by a technician during the normal course of his repairs. Therefore, it would have been obvious to one of ordinary skill in the art to incorporate the transmission prevention functionality into Reid's maintenance system to allow technicians to prevent redundant transmissions or even power down network connections so he can properly work and fix the faults. Further, automating a process that was once manually performed involves only routine skill in the art and does not provide patentable distinction over the prior art. In re Venner, 120 USPQ 192.

- As to claim 16, Spira discloses each of said first and second computers is connected to a database collecting all information relating to the facilities and maintenance thereof, and the information transmitted by said local monitoring units [0124, 0357].
- 6> As to claim 17, Spira discloses the system wherein the first and second computers comprise:

means for counting a number of maintenance tasks carried out for each piece of said facilities during a first period of time, for comparing said maintenance task number to a first threshold [0019, 0139 where: Spira clearly indicates reviewing frequency of work and a mutual interest by both parties to evaluate the maintenance operations in comparison with "performance indicators" to determine the effectiveness. Thus it would be obvious to one ordinary skill in the art to have reasonably inferred that the performance indicators refer to the maintenance tasks described throughout Spira's disclosure];

means for computing a total duration of the maintenance tasks performed on each piece of said facilities during a second period of time, for comparing said total duration to a second threshold [0019, 0139];

means for computing an elapsed time between a time when piece of facilities is detected as malfunctioning and the start time of a repair task on said piece of facilities, for comparing said elapsed time with a third threshold [0019, 0164, 0348: "time limit which is stipulated"]; and

means for computing a restart time to put a piece of said facilities to a normal operational state after the start time of a repair task on said piece of facilities with a fourth threshold [0019, 0139, 0140, 0258].

Spira does not expressly disclose displaying a fault signal when the items exceed their thresholds. However, such functionality is obvious in light of Spira's disclosure of:

"key performance indicators are generated for each customer to permit both the provider and receiver of the services to evaluate the effectiveness of the provided services" [0019]; and

"Historical data is reviewed, failure analysis is reviewed. A review is made of safety issues, employ statistical techniques to evaluation frequency of work and employ reliability engineering techniques to evaluate design out requirements" [0139].

Spira is clearly motivated to provide a symbiotic relationship between customer manager and maintenance and ensuring the quality of the maintenance operations as defined by the maintenance contract, illustrated by the performance indicators and monitoring and evaluation of the maintenance work disclosed throughout his specification.

As the display of alarms or "fault signals" when thresholds are met are well known in the art, their implementation into Spira's review and evaluation process of the maintenance operations would be obvious to one of ordinary skill in the art. The fault signals or alarms would be a benefit to customers in aiding the evaluation of the maintenance company's work and ensuring that they meet the performance indicators.

As to claim 18, Spira does not disclose computing penalties if a maintenance fault concerning the exceeding of one of the four thresholds have been detected by second computer. However, as discussed in the previous paragraph, Spira discusses utilizing performance indicators to evaluate effective of the maintenance. Further, Spira discloses that bonus penalty principles are well known in the art [0005].

Therefore, it would have been obvious to one of ordinary skill in the art to incorporate penalties into Spira's maintenance system to enable customers to enforce the contract agreed upon between the customer and maintenance company; the concept of enforcing a contract and issuing reprimands based on the limitations of the contract are well known in the art.

- As to claim 19, Spira discloses the first and second thresholds are set as a function of said facilities [0137], and wherein the third and fourth thresholds are defined as a function of the detected malfunction or type of repair [0137, 0138], the thresholds being defined by the maintenance contract binding the maintenance company to the managing company [0019 | 0047, 0137].
- 9> Claims 20 and 21 are rejected under 35 U.S.C § 103(a) as being unpatentable over Spira, in view of Petite et al, U.S Patent No. 6.437.692 ["Petite"].
- As to claim 20, Spira discloses the system according to claim 13, wherein transmissions between the local monitoring units and the first and second computers are carried out through a basic wire or radio telephone network [0022] but does not disclose

wherein the local monitoring units further comprises for setting-up a link between the local monitoring units and the first and second computers through a radio telephone network, when the local monitoring units cannot access a basic telephone network.

- Petite discloses the local monitoring units further comprises for setting-up a link between the local monitoring units and the first and second computers through a radio telephone network, when the local monitoring units cannot access a basic telephone network [column II «line 58» to column 12 «line 3» | claim II]. It would have been obvious to one of ordinary skill in the art to have incorporated Petite's backup links into Spira. One would have been motivated to perform such an implementation as backup network connections provide backup when primary means of connection fails. Such an method is well known and expected in the art.
- As to claim 21, Spira discloses wherein at least one local monitoring unit of a group of said local monitoring units which are installed close from one another comprises a data transmission unit, wherein said data transmission unit comprises means for transmission over the basic telephone network and means for transmission over the radio telephone network, and wherein other local monitoring unites of the site comprising means for connection to said data transmission unit [Figure 2 | 0121, 0134, 0143 where Spira's modules perform the monitoring and communicate with the maintenance company any detected maintenance information].

- Claims 22 and 23 are rejected under 35 U.S.C § 103(a) as being unpatentable over Spira and Petite, in further view of Johnson et al, U.S Patent No. 6.553.336 ["Johnson"].
- Spira does not specifically disclose the radio telephone network transmission means in the data transmission unit are provided with a backed-up power supply for sending a power supply fault message when the local monitoring unit is no longer powered.
- Johnson discloses a radio telephone network transmission means in the data transmission unit are provided with a backed-up power supply for sending a power supply fault message when the local monitoring unit is no longer powered [column 15 «lines 47-53»]. It would have been obvious to one of ordinary skill in the art to incorporate Johnson's power supply monitoring functionality into Spira's remote monitoring system, and in particular his monitoring modules (hardware and software) to allow the monitoring unit to keep running if the primary power supply fails.
- Spira does not disclose his local monitoring units comprising a means for detecting internal faults.
- Johnson discloses local monitoring units comprising means for detecting internal faults pertaining to operation of said local monitoring unit, and means for sending malfunction information to a third computer if such internal faults are detected, said third computer being connected to local monitoring units through said transmission network and

comprising means for receiving and processing and storing into a database the internal malfunction information transmitted by the local monitoring units [column 15 «line 47» to column 16 «line 24»].

It would have been obvious to one of ordinary skill in the art to incorporate Johnson's local monitoring unit detection system into Spira. Such an system would provide a layer of fault detection not presently found in Spira. The ability for the maintenance company to monitor the local monitoring units provides a common-sense benefit to detect if any problems are occurring with their local modules and enable faster repairs.

- Claims 24-25 are rejected under 35 U.S.C § 103(a) as being unpatentable over Spira, in view of Whynacht, U.S Patent No. 4.568.909.
- 19> As to claim 24, Spira does utilizing a timer [0348] but not the timers as claimed.
- 20> Whynacht discloses a system wherein each of said local monitoring units comprises:

  means for starting a first timer after a malfunction has been detected on the associated
  facility [column 21 «line 56» to column 22 «line 6»];

means for starting a second timer if the first timer has timed out without the corresponding fault having disappeared [column 22 «lines 46-55»];

means for sending a malfunction message to the first and second computers if the second timer has timed out without the corresponding fault having disappeared [column 22 «lines 10-15»];

means for starting a third timer after a fault has disappeared [column 24 «lines 55-66»]; and

means for transmitting a fault disappearance message if the third timer has timed out without the corresponding fault reoccurring [Figures 14, 15 | column 25 «lines 1-24» where:

Whynacht's "Return to Normal" message is analogous to a fault disappearance message].

It would have been obvious to one of ordinary skill in the art to incorporate

Whynacht's timers into Spira to increase the functionality of Spira's remote monitoring

system. One would have been motivated to perform such an implementation to insure that
the alarm conditions in the system are proper alarm conditions and not false alarms, thereby
minimizing costs of sending out maintenance engineers to the facilities [see Whynacht,
column 22 «lines 46-55» | column 23 «lines 4-6»].

- As to claim 25, Spira does not disclose the system wherein a respective duration for each of the first, second and third timers is determined independently from each other as a function of each malfunction type.
- Whynacht discloses a system wherein a respective duration for each of the first, second and third timers is determined independently from each other as a function of each malfunction type [column 21 «line 56» to column 23 «line 27» | column 24 «lines 55-67»]. It would have been obvious to one of ordinary skill in the art to incorporate Whynacht's varying timers into Spira to take into account the various malfunctions that may occur in the monitored devices.

#### (10) Response to Argument

I. Spira's published patent application is entitled to the benefit of the filing date of its provisional application because the provisional application properly supports the subject matter relied upon to make the rejection

The 35 U.S.C. 102(e) critical reference date of a U.S. application publication entitled to the benefit of the filing date of a provisional application under 35 U.S.C. 119(e) is the filing date of the provisional application with certain exceptions if the provisional application(s) properly supports the <u>subject matter relied upon to make the rejection</u> in compliance with 35 U.S.C. 112, first paragraph (emphasis added). <u>MPEP §2136.03(III)</u>. To comply, the provisional application must contain three elements: (A) a written description of the invention; (B) the manner and process of making and using the invention (the enablement requirement); and (C) the best mode contemplated by the inventor of carrying out his invention. Spira's provisional application contains all three elements and is in compliance with 35 U.S.C 112, first paragraph. Thus, Spira's published patent application is entitled to the benefit of the filing data of the provisional application.

Applicant contends that the Examiner has not determined that the subject matter of all the claims in the published Spira et al. application were in the inventor's possession at the time that the provisional application was filed. See Applicant's Appeal Brief, pg. 9, ¶2. However, the test is whether the subject matter relied upon to make the rejection, and not the subject matter of the claims, is supported Spira's provisional application. Spira's published patent application qualifies as prior art because the Spira provisional application properly supports the subject matter relied upon to make the rejection.

A. Spira's provisional application contains a written description of the subject matter relied upon to make the rejection

To satisfy the written description requirement, a patent specification must describe the claimed invention in sufficient detail that one skilled in the art can reasonably conclude that the inventor had possession of the claimed invention. See, e.g., Moba, B.V. v. Diamond Automation, Inc., 325 F.3d 1306, 1319, (Fed.Cir. 2003); Vas-Cath, Inc. v. Mahurkar, 935 F.2d at 1563. It is now well accepted that a satisfactory description may be in the claims or any other portion of the originally filed specification (emphasis added). MPEP §2163(1).

Further, an applicant shows possession of the claimed invention by describing the claimed invention with all of its limitations using such descriptive means as words, structures, figures, diagrams, and formulas that fully set forth the claimed invention. Lockwood v. American Airlines, Inc., 107 F.3d 1565, 1572 (Fed. Cir. 1997). Possession may be shown in a variety of ways including...showing that the invention was "ready for patenting" such as by the disclosure of drawings or structural chemical formulas that show that the invention was complete. See Pfaff v. Wells Elecs., Inc., 525 U.S. 55, 68 (1998).

Here, Spira's provisional application consists of a two page specification

["provisional's specification"], thirty-five claims ["provisional's claims"] and ninetyfive pages of brochures describing the invention. The subject matter relied upon to
make the rejection include locally installed modules that enable online monitoring,
integrated sensors that enable continuous monitoring, means for tracking technicians
to ensure that they are properly doing their jobs and reviewing performance indicators

to ensure compliance with negotiated contractual obligations. See Final Rejection, filed 9.19.2005, pgs. 3-5.

The thirty-five claims describe the claims in Spira's published patent application. The provisional's specification, claims and brochures adequately convey that Spira was in possession of "modular system" that helps provide technical services to a customer. See Spira provisional, pg. 1, \$1. Spira's claimed invention is directed towards providing "customer-related technical services" using "software tools and hardware tools" in compliance with negotiated key performance indicators. See Spira provisional, pgs. 3-13, claims 1-24. Spira achieves this goal in part by installing modules at various business levels that provide technical services such as consulting, repairs and parts supply. See Spira provisional, pgs 1-2. The information in the brochures further provide written description by utilizing a combination of words, structures, figures and diagrams. Thus, Spira's provisional reasonably conveys to one skilled in the art that he was in possession of his claimed invention.

# B. Spira's provisional application discloses the manner and process of making and using the invention

Spira's provisional is sufficiently enabling to one of ordinary skill in the art to make and use the invention. "For a computer-related invention...the specification should disclose...how to integrate the programmed computer with other elements of the invention, unless a skilled artisan would know how to do so without such disclosure". In re Donohue, 550 F.2d 1269, 1271 (CCPA 1977) ("Employment of block diagrams and descriptions of their functions is not fatal under 35 U.S.C. 112, first

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paragraph, providing the represented structure is conventional and can be determined without undue experimentation"). MPEP § 2105(V)((B)(2).

Here, Spira's invention is directed towards a modular system of providing technical services to a customer. Through the use of numerous diagrams, figures and related descriptions, Spira's provisional application sufficiently details how the modules are to be created and implemented throughout the customer's various business levels. The description provides details on how the modules are used to achieve the goals set forth by the disclosure in the brochures. Spira's brochures contain block diagrams and descriptions of the overall invention and system. See Spira brochure, pgs. 6, 9 and 21 (Spira's block diagrams detailing the invention's implementation). Spira further discusses other aspects of his invention, including utilizing performance based contracts so companies may monitor the work of the maintenance company and the use of their modules allows for proactive maintenance of the customer's facility. See Spira brochure, pgs. 21, 38 and 82.

Based on Spira's description of his modules and the background provided by the brochures, one of ordinary skill in the art would be enabled to make and use the invention. While the experimentation may be complex, it seems that maintenance companies typically engage in such experimentation to provide remote maintenance services to customer facilities. Further, Spira only need provide how the modules would be integrated with other elements of the invention. Spira's description achieves this by detailing that the modules may be implemented as software and that these modules are integrated at various levels of the customer's facility.

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C. Spira's provisional application sets forth the best mode contemplated by the inventor of carrying out his invention

Deficiencies related to disclosure of the best mode for carrying out the claimed invention are not usually encountered during examination of an application because evidence to support such a deficiency is seldom in the record. Fonar Corp. v. General Electric Co., 107 F.3d 1543, 1548-49, 41 USPQ2d 1801, 1804 (Fed. Cir. 1997). The examiner should assume that the best mode is disclosed in the application, unless evidence is presented that is inconsistent with that assumption. MPEP §2165.02. A best mode analysis has two components. MPEP §2165.03. The first component is a subjective inquiry because it focuses on the inventor's state of mind at the time the application was filed. Unless the examiner has evidence that the inventors had information in their possession: (1) at the time the application was filed; (2) that a mode was considered to be better than any others by the inventors, there is no reason to address the second component and there is no proper basis for a best mode rejection. Id.

Here, Applicant broadly asserts, without evidence, that Spira suffers from a lack of best mode. The Office submits that Spira's description and brochures provide a best mode of his invention, providing in detail how the modules are integrated to achieve the goal of providing maintenance services to customers.

II. Claims 13 and 15-19 are obvious in view of Spira's published patent application

Like the present invention, Spira is directed towards a management and operation technique for remotely maintaining and monitoring facilities. Spira's published patent

application ("Spira"), ¶1, 22. Spira's invention comprises various software and hardware modules implemented at both the facility that is to be monitored as well as the monitoring center that is remote from the facility. Spira, ¶37. One of the key elements of Spira is a performance-based contract that establishes key performance indicators to be met by the monitoring provider. Spira, ¶155. Applicant's claims are obvious in view of Spira.

#### A. Claim 13

Applicant argues that Spira does not teach a system comprising local units installed near machines to be monitored and comprising means for performing a diagnostic of the condition of the machine and transmitting the diagnostic information via a network. See Applicant's brief, pg. 13, §3. Applicant also argues that there is no teaching for measuring operation parameters of the associated piece of facilities, means for being connected to a transmission network, means for transmission through the network the detected operational state of the facilities, and control means for allowing a technician to real time notify the start and end time of his task performed. See Applicant's brief, pg. 14, §1 and pg. 16, §2.

First, Spira is directed towards providing "[i]nnovative diagnostic tools include(ing) the use of state of the art measurement and diagnostic systems which enable the accurate identification of the condition of the plant and its machinery".

Spira, ¶239. Two goals of Spira's invention is to provide preventative maintenance and efficient repairs that minimize downtime of facilities. Spira, ¶32, 134. Spira further discloses: "[i]ntegrated sensors are used in power generators to collect

measurements continuously during operation so that preventative maintenance actions can be taken when necessary". Spira, ¶354. Spira discloses that the sensors are online sensors. Spira, ¶231. Indeed, Spira discloses that continuous monitoring of the conditions on-line or telemonitoring allows the plant to operate at maximum efficiency. Spira, ¶354.

Second, Spira also discloses a large element of his invention is to provide a knowledge base that contains historical data of maintenance performed at a facility.

Spira, ¶21. This historical data includes frequency of work performed, review of maintenance actions and duration of work. Spira, ¶138. Spira discloses efficient maintenance operation using computers to plan, schedule and record motor maintenance work. Spira, ¶193. Spira discloses that the provider operates within the framework of a specified cost, an agreed time schedule and an expected quality and uses known time scheduling software. Spira, ¶299, 341. Finally, Spira discloses utilizing a program management module is offered which provides a focal point for the information management, improved tracking and reporting of performance. Spira, ¶258.

Spira is clearly directed towards providing a system for providing remote maintenance by utilizing locally installed sensors that continuously monitor equipment and collect information concerning the operating states of a facility for diagnostic purposes. Applicant downplays Spira's sensors as being merely ordinary however, the integrated sensors perform all the functions as claimed. The sensors enable the remote centers to continuously monitor conditions on-line so that the plant

may operate at maximum efficiency. The sensors collect operation parameters, is connected on-line to a remote monitoring center, and is enabled to transmit any collected information to the center.

Spira does not expressly disclose that the sensors have a control means for allowing a technician to notify the start and end time of his task. Applicant argues that Spira does not teach such an ability. However, such functionality is implied by Spira's disclosure of recording the duration of work done at a facility. The fact that Spira record the duration of work implies that the invention knows the start and end time of the maintenance performed. Additionally, Spira discloses utilizing time schedules which enable the customer to monitor and track the performance of maintenance within the framework of the contract parameters. Spira clearly is concerned with providing customers the ability to ensure that the maintenance work performed is within the parameters set forth by the performance-based contract and time schedule. Thus, it would have been obvious to one of ordinary skill in the art that the start and end-time notification functionality is implicit in Spira's invention.

#### B. Claim 15

Claim 15 is directed towards a limitation whereby the local units are prevented from transmitting over the network during an inspection. The Office equates such functionality with the ability of a technician to turn off the computer while inspecting or repairing the computer. While the computer is off and being inspected, the computer is prevented from transmitting anything over the network. Such a

Dellacona expressly states:

feature is useful and obvious because it is safer for a technician to inspect and repair a computer when it is turned off. Powering off of a computer during an inspection also prevents a computer from performing any other actions, including transmitting information over a network. Thus, utilization of a computer's on off switch of a computing device prevents transmissions during an inspection. Applicant requests a reference teaching this functionality. In response and pursuant to MPEP §2144.03(C), the Office submits the prior art reference Dellacona, U.S Patent No. 6.260.155.

"Depending upon the nature of a component failure, corrective action with prior art systems can include removal and replacement of a completely or partially failed device. Such system maintenance typically requires that the entire server system be taken off-line, and powered down before the physical replacement operation can be performed." column 1 «lines 48-53».

Dellacona discloses that servers, representative of any computer, are typically taken off line and powered down during an inspection which supports the Office's position.

This functionality reads on Applicant's claimed limitation.

#### C. Claim 16

Applicant simply repeats the same argument seen in a paragraph from Applicant's remarks, filed January 24, 2006. See Applicant's remarks, filed January 24, 2006, pg. 11, ¶3. In the Advisory Action, in response to this argument, Applicant was directed towards paragraph 87 in Spira. See Advisory Action, filed February 14, 2006, pg. 8, ¶7.

# D. Claim 17

In regards to claim 17, Applicant asserts that Spira does not teach precise contractual objectives such as: (a) an elapsed time between a time when a piece of facility is detected as malfunctioning and the start time of the repair task; (b) a restart time to put a piece of facility to a normal operational state; (c) a number of maintenance tasks; and (d) a total duration of the maintenance tasks. In regards to (a), Spira discloses that engineers must respond within a certain time limit as stipulated by the performance contract. Spira, §348. The implication of this feature is that Spira must keep track of the response time of the engineers which is consistent with Spira's goals of executing performance-based contracts. In regards to (b), Spira discloses that one goal is to minimize downtime for facilities. Spira, \$164. Down time is essentially the time taken to put a facility back to a normal operational state. Additionally, Spira discloses that short arrival times and fault clearance times are provided. To one of ordinary skill in the art, a fault clearance time signals the time taken by a technician to clear a fault. This features is analogous to Applicant's claimed limitation. In regards to (c) and (d), Spira discloses recording frequency of work as well as duration of work. Spira, ¶139.

Applicant also contends that Spira fails to teach displaying fault signals.

Applicant downplays Spira's teaching of utilizing an on-live service to help detect faults and their locations in the shortest amount of time. Spira, \$302. Applicant argues that this cited portion deals with software modules. Applicant's brief, pg. 21, \$2.

However, the cited portion does not support Applicant's argument because it makes

no reference that the detection of faults deals solely with software modules. Indeed, the cited portion references how specialists may provide direct help to plants. Spira's teaching of detecting faults and displaying of their location reads on Applicant's claimed limitation of displaying fault signals.

#### E. Claim 18

Applicant argues that Spira does not disclose a second computer having means for automatically computing penalties to be applied. First, Spira discloses that penalty systems are well known in the art. Spira, ¶5. Second, Spira's invention includes a contract that uses key performance indicators to gauge the performance of the maintenance company. Spira, ¶19. The key performance indicators are built into a contract incentive system to align the goals of maintenance provider with the goals of the customer. Spira, ¶318. It would have been obvious to one of ordinary skill in the art to have utilized the bonus penalty service that is well known in the art to enforce the key performance indicators of Spira's performance-based contract. And third, the claim language does not disclose a means for automatically computing penalties.

#### F. Claim 19

Applicant argues that Spira does not disclose a pair of thresholds as a function of the facilities and setting a second pair of thresholds as a function of the detected malfunction. Contrary to Applicant's argument, Spira discloses these limitations.

Spira discloses setting key performance indicators for facilities. Spira, §137. The key

performance indicators are analogous to the claimed thresholds. Additionally, Spira discloses setting thresholds, such as frequency of work and duration of work, that are related to detected malfunctions. <u>Spira</u>, §139. Spira further discloses a threshold for measuring a response time by engineers. <u>Spira</u>, §348.

#### III. Claims 22 and 23 are obvious in view of Spira, Petite and Johnson

With respect to claim 22, Applicant argues that Johnson does not teach providing a backed up power supply for sending a power supply fault message when the local monitoring unit is no longer powered. Applicant asserts that Johnson's teaching of a backup power supply that transmits a power fail report to a monitoring system is not analogous to the claimed limitation. Johnson is relied upon to teach the functionality of the claim – providing a backed-up power supply to send a power supply fault message. Johnson's power fail report is considered to be analogous to the power supply fault message because they have the same functionality and are even transmitted by back-up power supplies. Thus, Johnson the claimed functionality.

With respect to claim 23, Applicant argues that the references do not teach sending malfunction information to a third computer which comprises a means for receiving, processing and storing into a database the malfunction information transmitted by the local monitoring units. Contrary to Applicant's argument, Johnson teaches this functionality.

Johnson discloses transducers which are analogous to local monitoring units. Johnson, abstract. The transducers are in contact with a database for transmitting internal status information concerning the operation of the transducer to a separate computer which

receives, processes and stores the information. <u>Johnson</u>, column 19 «lines 51-67», column 23 «lines 27-38».

#### IV. Claims 24 and 25 are obvious in view of Spira and Whynacht

Applicant argues that Whynacht does not teach a means for sending malfunction messages to first and second computers if the second timer has timed out. See Applicant's brief, pg. 25, ¶1. Contrary to Applicant's argument, Whynacht teaches that remote monitoring information is sent to both a local monitoring office as well as a central monitoring office. Whynacht, column 2 «lines 43-60». Whynacht's local office and central monitoring office is analogous to a first and second computer.

# (11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Dohm Chankong

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